## Drugs modulating stochastic gene expression affect the erythroid differentiation process

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## Supplementary data

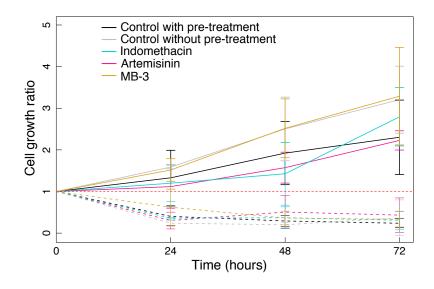


Figure S1: Drugs do not change the erythroid commitment. T2EC were induced to differentiate for 24 (solid lines) and 48 (dashed lines) hours and subsequently seeded back in self-renewal conditions. Cells were then counted every day for 3 days. The data shown are the mean  $\pm$  standard deviation calculated on the basis of three independent experiments. The growth ratio was computed as the cell number divided by the total cells at day 0.

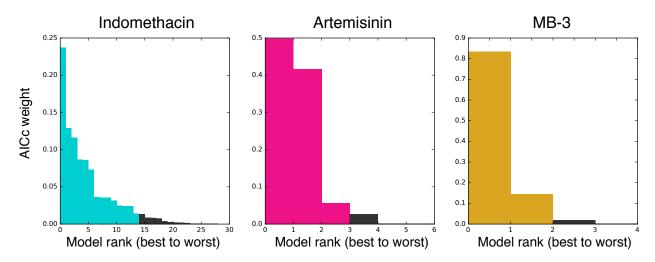


Figure S2: Model selection by Akaike weights. Shown are the Akaike weights of the models, sorted from best to worst. For readability, the worst models were omitted. For each drug, the coloured bars represent the models which amount to 95% of the overall Akaike's weight.

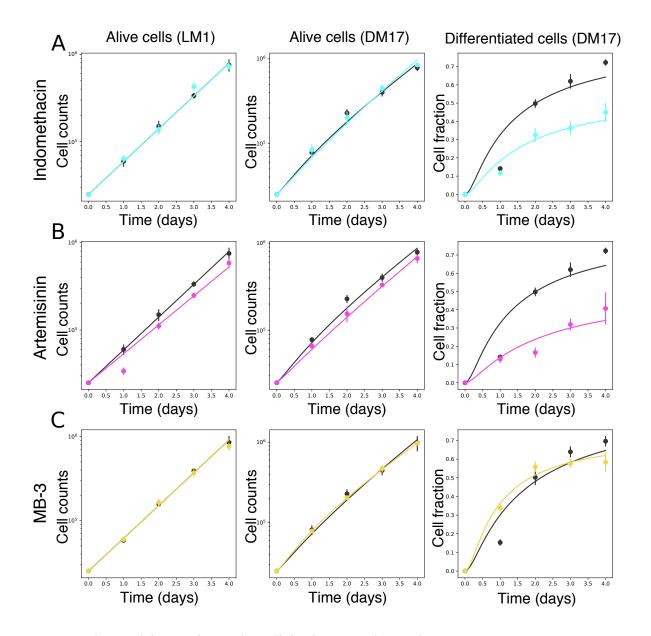


Figure S3: The model reproduces the cellular kinetics observed *in vitro*. Simulation of the model in the untreated (black) and treated cases (color). Solid lines represent a simulation of the best model selected by Akaike's weights. Dots are the experimental data. On the left and the center are respectively displayed the total number of living cells in self-renewing (LM1) and differentiated (DM17) media (in log-scale). On the right are displayed the fraction of differentiated cells in differentiated (DM17) medium.